CPSC 421/501 Sept 24, 2020

Topics:

- Resolution of Russell's Paradox
- Some other paradoxes

- Start Ch. 1 on Regular Languages [Sip]

  Section 1: Finite Automata (DFA's)

  Section 2: Non-deterministic Finite Automata (NFA's)

Breakout Room Questions:

(1) Come up with your own paradox (related to those of §5,6 of Handout)

(2) Give a DFA that recognizes

$\{0,3,6,9,12,15,\ldots\} \subset \{0,\ldots,9\}^*$

(3) Give a DFA that recognizes

$\{0,3,6,9,03,06,09,12,15,\ldots\}$

(4) Give a DFA that recognizes

$\{\varepsilon,0,3,6,9,03,06,09,12,15,\ldots\}$

(5) Is there a DFA that recognizes

$\{0,7,14,21,28,35,42,\ldots\}$

(6) Give a DFA that recognizes

$\{1^5, 1^7\} \subset \{1\}^*$

(7) Give a DFA that recognizes

$\{1^5, 1^7\}^* \subset \{1\}^*$